Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

Claim 1 (currently amended): A semiconductor component for generating visible polychromatic light, comprising:

a semiconductor chip having a first semiconductor layer and a second semiconductor layer adjacent to said first semiconductor layer;

said second semiconductor layer including an electroluminescent region emitting visible light of a first color having a first wavelength;

said first semiconductor layer having a first band gap and being specifically doped to form states of allowed energy levels within said first band gap, said electroluminescent region having a second band gap, said first band gap being smaller than said second band gap;

said first semiconductor layer absorbing part of the visible light of the first color and said first semiconductor layer re-emitting visible light of a second color having a second

wavelength by a radiant transition involving said allowed energy levels within said first band gap, the second color being different from the first color, and the second wavelength being longer than the first wavelength.

Claim 2 (cancelled).

Claim 3 (original): The semiconductor component according to claim 1, wherein:

said first semiconductor layer includes a given material with an absorption edge having an energy level corresponding to a third wavelength, the third wavelength is longer than the first wavelength of the visible light emitted by said second semiconductor layer and is shorter than the second wavelength; and

said given material, when excited with radiation of a wavelength shorter than the third wavelength, re-emits radiation of the second wavelength.

Claim 4 (original): The semiconductor component according to claim 1, wherein a substrate for epitaxially growing said second semiconductor layer is also utilized as said first semiconductor layer.

Claim 5 (original): The semiconductor component according to claim 1, wherein:

said semiconductor chip includes a growth substrate; and

said first semiconductor layer is disposed between said growth substrate and said second semiconductor layer.

Claim 6 (original): The semiconductor component according to claim 1, wherein:

said semiconductor chip includes a growth substrate for epitaxially growing said second semiconductor layer; and

said second semiconductor layer has a side opposite said growth substrate, said first semiconductor layer is disposed on said side of said second semiconductor layer opposite said growth substrate.

Claim 7 (original): The semiconductor component according to claim 1, wherein:

said first semiconductor layer includes doped ZnSe; and

said second semiconductor layer has an active zone containing $Cd_xZn_{1-x}Se/ZnSe$ with $0 \leq x \leq 1$.

Claim 8 (original): The semiconductor component according to claim 1, including a parabolic mirror, said semiconductor chip being disposed in said parabolic mirror.

Claim 9 (previously presented): The semiconductor component according to claim 1, wherein said first semiconductor layer and said second semiconductor layer are configured to emit white light from said semiconductor chip.

Claim 10 (new): A semiconductor component for generating visible polychromatic light, comprising:

a semiconductor chip having a first semiconductor layer and a second semiconductor layer adjacent to said first semiconductor layer;

said second semiconductor layer including an electroluminescent region emitting visible light of a first color having a first wavelength;

said first semiconductor layer having a first band gap and being specifically doped to form states of allowed energy

levels within said first band gap, said electroluminescent region having a second band gap, said first band gap being smaller than said second band gap;

said first semiconductor layer absorbing part of the visible light of the first color and said first semiconductor layer re-emitting visible light of a second color having a second wavelength by a radiant transition involving said allowed energy levels within said first band gap, the second color being different from the first color, and the second wavelength being longer than the first wavelength;

said first semiconductor layer and said second semiconductor layer being configured to emit white light from said semiconductor chip.